

# **AE4SW**

**4 Zone Stereo Speaker Selector** 



Congratulations on your purchase of the AudioSource AE4SW Speaker Selector. This product is designed to distribute stereo music to four independent listening zones via connection with your existing audio system.

Please read this Installation Manual to ensure the proper installation and performance of your AE4SW Speaker Selector.

## **Function of the AE4SW**

The AE4SW is a low-profile speaker-level audio distribution system with individual On/Off selectors controlling signal distribution to four listening zones. Pass-through amplifier input terminals allow easy connection of additional AE-SW selectors. User-selectable protection circuitry ensures that the combined speaker load impedance presented to the amplifier never falls below 6 ohms per channel.

The AE-SW selector is designed to be used independently or in conjunction with AE100VC Impedance Matching Volume Controls. These provide independent volume control for each zone and provide impedance matching in place of the AE-SW selector.

When using impedance matching volume controls, the AE-SW protection circuit should be in the off position. Follow instructions in the AE100VC manual for correct impedance matching settings.

# **Installation and Connection Precautions**

Polarity (+/-) for the input and output speaker terminals is clearly marked on the AE4SW rear panel. Speaker wire is coded to identify each conductor as either positive (+) or negative (-). Maintain (+) to (+) and (-) to (-) connections between all components in your installation.

**Note:** UL rated CL3 speaker wire is recommended when running wire inside your walls. In many areas it may be required by code. To avoid picking up hum and interference do not install the speaker wire parallel to any 120V power lines. If the speaker wire needs to cross a 120V power line at a right angle this will not create a problem. If you are uncomfortable with running the speaker wire yourself, it is recommended that you retain a qualified custom home installation specialist or electrician.

## **Installation and Connection Procedures**

- 1. Route the speaker cables from each speaker zone and the amplifier to the terminals on the AE-SW. These terminals will accept up to 10 gauge speaker cable.\* The amplifier cables connect to the terminals marked "INPUT" on the back of the AE-SW unit. The speaker cables connect to the numbered Zone output terminals on the AE-SW selector.
- 2. Strip 3/8" of insulation from the end of the cable and twist the exposed end to avoid fraying.
- 3. Press the spring-loaded lever on the speaker terminal and insert the speaker cable, carefully observing the polarity.
- 4. Release the spring loaded lever to clamp the cable in place. Gently pull on the cable to ensure it's securely connected.
- 5. The system is now ready for testing. Turn on the sound system and set the amplifier's volume control to a moderate level.
- 6. Sound should be heard from each zone when its button is depressed. Check each zone for proper left and right connections by activating each zone with the balance adjusted to full left and then to full right.
- 7. Attach the custom die-cut labels provided to the buttons of the AE4SW, referencing each button to its zone within the installation.

## **Recommended Speaker Wire Gauges**

Excess resistance caused by using an undersized speaker wire can result in loss of power, loss of bass definition and loss of overall dynamic range. Over extremely long wire runs you may even experience a loss of high frequency content in the audio signal.

To prevent sonic degradation in your speaker installation, total speaker wire resistance should be kept below 0.5 ohms. The following table lists recommended speaker wire gauge versus wire run length.

50' or less - 16 Gauge 2-Cond. CL3 Rated 50' - 150' - 12 Gauge 2-Cond. CL3 Rated 150' - 200' - 10 Gauge 2-Cond. CL3 Rated

\* Use of speaker cable smaller than 16 gauge is not recommended.

# **Operational Details**

#### 1. Zone Select Switch

Use labeling kit for zone identification. Press in to send music to the zone controlled by each switch.

#### 2. Input Terminal

Connects speaker cable from amplifier to AE4SW unit.

## 3. Pass Through Terminal

Connects speaker signal to other AE-SW units. Do not connect to speakers! Amplifier damage may occur.

#### 4. Power Protection Circuit Switch

Read Installation Precautions section of this manual for full instructions regarding the use of this switch.

- 5. Zone 3-4 Output
- 6. Zone 1-2 Output

# Installation Precautions

- Never place the AE4SW where it would be exposed to excessive moisture or heat.
- Allow for a minimum of 1 inch of clearance above the top of the unit.

# **Installation Precautions** (continued)

 Under no circumstances turn off the power protection circuit unless your amplifier can handle the combined impedance of all zones activated.

### For example:

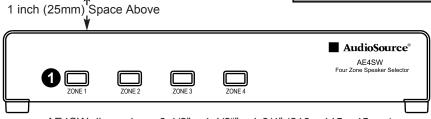
With the power protection circuit switch in the "OFF" position, an AE4SW with four pairs of 8 ohm speakers connected will present the amplifier with a 2 ohm load per channel. This may damage your amplifier or cause it to shut down.

With the power protection circuit switch "ON", an AE4SW with four pairs of 8 ohm speakers connected will present the amplifier with a 6 ohm load per channel which will not present a problem for most amplifiers.

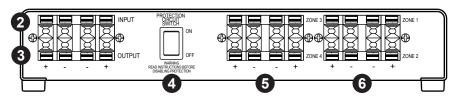
Consult your authorized dealer and/or the owner's manual for your amplifier for complete details.

- Power handling without the protection circuit switch engaged is 140 watts per channel.
- Power handling with the protection circuit switch engaged is 70 watts per channel.

		Power Capacity Per Channel
1-2	May Be Off	140 Watts
3-4	Must Be On	70 Watts
3-4	May Be Off	140 Watts
IF USING AE100VC IMPEDANCE MATCHING VOLUME CONTROLS IN EACH ZONE		



AE4SW dimensions: 8-1/2" x 4-1/2"" x 1-3/4" (216 x 115 x 45mm)



Two Year Limited Warranty
AudioSource a division of Peak Audio Group, Ilc, warrants this product against defects in materials and workmanship for a limited period of time. For a period of two (2) years from date of original purchase, we will repair or replace the product, at our option, without charge for parts. Customer must pay for all labor charges associated with the removal and re-installation of this product for the limited period and all parts and labor charges after the limited warranty period expires. The limited warranty period for factory refurbished products expires after ninety (90) days from date of original purchase. This limited warranty applies only to purchases from authorized AudioSource Retailers or Distributors. This limited warranty is extended only to the original purchaser and is valid only to consumers in the United States.

Consumers are required to provide a copy of the original sales invoice from an authorized AudioSource Retailer or Distributor when making a claim against this limited warranty. This limited warranty only covers failures due to defects in materials or workmanship that occur during normal use. It does not cover failures resulting from accident, fire, flood, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, modification, service by anyone other than AudioSource, or damage that is attributable to Acts of God. It does not cover costs of transportation to AudioSource or damage in transit. The customer should return their defective product, freight prepaid and insured, to AudioSource only after receiving a Return Authorization

Repair or replacement under the terms of this warranty does not extend the term of this warranty. Should a product prove to be defective in workmanship or material, the consumer's sole remedies will be repair or replacement as provided under the terms of this warranty. If the defective product is discontinued AudioSource may replace the product with an equivalent or superior product at its option. Under no circumstances shall AudioSource be liable for Jossi'r damage, direct, consequential or incidental, arising out of the use of or inability to use the product. There are no express warranties other than described above.

